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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,243	02/06/2002	Hisen-Hwa Tseng	67,200-658	3355

7590 10/21/2003

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EXAMINER	
GONZALEZ, MADELINE	
ART UNIT	**PAPER NUMBER**
2859	

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Offic Action Summary	Applicati n No.	Applicant(s)	
	10/072,243	TSENG ET AL.	
	Examiner	Art Unit	
	Madeline Gonzalez	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 February 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference number 82, as stated on page 11, line 19. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: reference numbers 58, and 64, as shown in Fig. 3. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 3 is objected to because of the following informalities:

a) Claim 3: "a opening" in line 4, should be replaced with --an opening--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 3: Claim 1 recites the limitation "at least two spring-loaded position sensing devices... with a finger protruding beyond an end surface", while claim 3 recites the limitation "a finger protruding through said opening of the case". These limitations are confusing because it is not clear if there are two different fingers or if applicant is referring to the same finger in both claims.

Appropriate correction is required.

Claims 2 and 4-10 are rejected due to their dependency on claim 1.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenquist (U.S. 6,530,736).

Rosenquist discloses a wafer cassette pod 20 and a position compensation assembly 122 (position sensing device), as shown in Fig. 5, having:

- a cassette pod shell 24 (body) formed of a top panel, a bottom panel, a front panel and two side panels;
- a rear opening in said cassette pod shell 24 (body) formed by said top panel, said bottom panel and said two side panels for receiving wafers therethrough, said two side panels inherently further comprising recessed slots on inside surfaces for positioning said wafers;

- at least two spring-loaded position compensation assemblies 122 (position sensing devices) each mounted in one side of port door 104, as shown in Fig. 10 with a plunger 124 (finger) protruding beyond and end surface of said port door 104 to, in a broad sense, push said cassette pod shell 24 (body) away from a load port of a process machine when said cassette pod shell 24 (body) is not properly positioned on said load port;
- wherein said at least two spring-loaded position compensation assemblies 122 (position sensing devices) are four position compensation assemblies 122 (position sensing devices) with two mounted in each side of the port door 104, as shown in Fig. 10;
- wherein said at least two spring-loaded position compensation assemblies 122 (position sensing devices) comprises a bushing 125 (case) having an opening in a front side, a plunger 124 (finger) protruding through said opening of the bushing 125 (case), and at least one spring 127 pushing said plunger 124 (finger) outwardly away from said bushing 125 (case);
- wherein said at least two spring-loaded position compensation assemblies 122 (position sensing devices) are mounted in a side of port door 104 with one near the top and the other near the bottom;
- wherein each of said at least two spring-loaded position compensation assemblies 122 (position sensing devices) is further equipped with an actuator 132 (connecting node) mounted on said plunger 124 (finger) for making electrical connection with a sensor

130 and for sending out a signal to a process controller when said connection is not made;

- wherein said two sides of the port door 104 include slot openings in said end surface for mounting said at least two spring-loaded position compensation assemblies 122 (position sensing devices);
- wherein said two sides of the port door 104 include slot openings in said end surface for frictionally engaging said at least two spring-loaded position compensation assemblies 122 (position sensing devices); and
- wherein said at least two spring-loaded position compensation assemblies 122 (position sensing devices) each are equipped with a spring 127 that has a spring constant sufficiently large to, in a broad sense, push a fully loaded wafer cassette pod 20 away from an opening of said load port.

Rosenquist lacks the specific location of the at least two spring-loaded position sensing devices, and the finger loaded by two or three springs.

With respect to the specific location of the at least two spring-loaded position sensing devices: Rosenquist discloses a wafer cassette pod 20 and at least two spring-loaded position compensation assemblies 122 (position sensing devices) each mounted in one side of port door 104, as shown in Fig. 10. Changing the location of the at least two spring-loaded position compensation assemblies 122 (position sensing devices) from the location shown by Rosenquist to a location in one of the two side panels of the cassette pod body, absent any criticality, is only

considered to be an obvious modification of the embodiment disclosed by Rosenquist that a person having ordinary skill in the art at the time the invention was made would be able to provide using routine experimentation based, among other things, on the desired accuracy, since it has been held that rearranging parts of an invention involves only routine skill in the art. See *In re Japikse*, 86 USPQ 70 (CCPA 1950). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to relocate the position sensing device disclosed by Rosenquist to a location in one of the two side panels of the cassette pod body in order to provide an alternate manner of determining the position of the pod door with respect to the port door.

With respect to the finger loaded by two or three springs: Rosenquist discloses a wafer cassette pod 20 and at least two spring-loaded position compensation assemblies 122 (position sensing devices), each of said at least two spring-loaded position compensation assemblies 122 (position sensing devices) having a finger protruding through an opening of a case and a spring pushing said finger outwardly away from said case. It has been held that the mere duplication of the essential working parts of a device involves only routine skill in the art. See *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the finger on said position sensing device loaded by two or three springs, in order to distribute the force generated by each spring throughout the surface of the finger and make the finger more stable when moving outward or inward from the case.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ueda et al. ('722) and SI et al. ('271) disclose devices having position sensing devices. Elliot et al. ('522), Ishitani et al. ('885), Bazydola et al. ('621), and Hladovcak disclose devices having a position sensing device including a finger and a spring. Peiter et al. ('707) discloses a wafer container having a groove to detect the presence of the wafer container on a support surface.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeline Gonzalez whose telephone number is (703) 308-7004. The examiner can normally be reached on Monday-Friday (8:00-5:30), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (703) 308-3875. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MG
October 14, 2003

Diego F.F. Gutierrez
Supervisory Patent Examiner
Technology Center 2800